

# YETDA INDUSTRY LTD.

# 5mm Yellow Color Super Bright LED Lamps Q500MJZ4D-BK

5mm with AlGalnP Dice •

Encapsulated with Water Clear Package with 2 leads •

Long Leads •

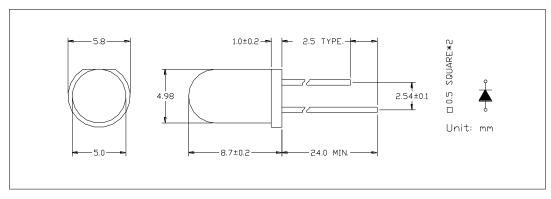
## **Absolute Maximum Ratings :** ( Ta=25℃ )

Parameter	Symbol	Maximum Rating	Unit				
Power Dissipation	PD	100	mw				
Reverse Voltage	VR	5	V				
Average Forward Current	Laf	30	mA				
Peak Forward Current (Duty=0.1,10KHZ)	IPF	200	mA				
Opertating Temperature Range	Topr	-20°C to +80	$^{\circ}\! \mathbb{C}$				
Storage Temperature Range	Tstg	-40°C to +100	$^{\circ}\!\mathbb{C}$				
Lead Soldering Temperature {1.6mm(0.063inch) From Body} 260°C For 3 Seconds							

## Electro-Optical Characteristics ( $Ta = 25^{\circ}C$ )

Parameter	Test Condition	Symbol	Min.	Тур.	Max.	Unit
Forward Voltage	$I_F = 20 \text{mA}$	VF	1.8	2.2	2.5	V
Reverse Current	V <sub>R</sub> =5V	IR			10	uA
Luminous Intensity	$I_F = 20 \text{mA}$	Iv	4000	6100	8200	mcd
Wavelength	$I_F = 20 \text{mA}$	λ	590	592	595	nm
Viewing Angle	$I_F = 20 \text{mA}$	2 <b>0</b> 1/2		30		deg

Item: 500





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## **Typical Electro-Qptical Characteristics Curve:**

Fig 1. Forward Current vs. Forward Voltage

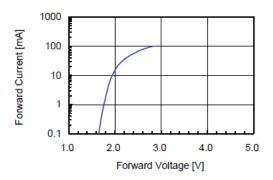


Fig 2. Relative Intensity vs. Forward Current

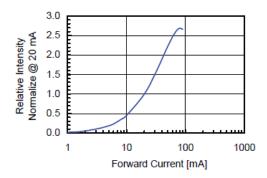


Fig 3. Forward Voltage vs. Temperature

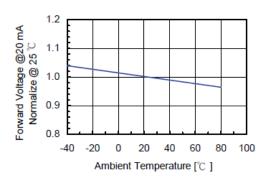


Fig 4. Relative Intensity vs. Temperature

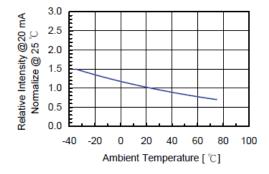
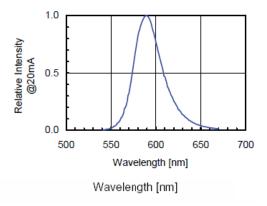


Fig 5. Relative Intensity vs. Wavelength



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### **Soldering:**

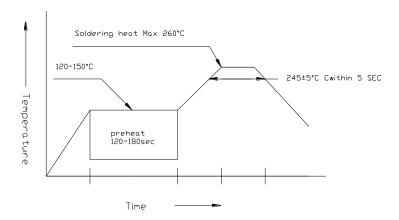
### 1. Manual of soldering

The temperature of the iron tip should not be higher than 260°C and Soldering within 3 seconds per solder-land is to be observed

### 2. DIP soldering (Wave Soldering):

Preheating:  $120^{\circ}\text{C} \sim 150^{\circ}\text{C}$  within 5 sec.  $260^{\circ}\text{C}$  (Max)

Gradual Cooling (Avoid quenching)



### ·Handling:

Care must be taken not to cause to the epoxy resin portion of Yetda LEDS while it is exposed to high temperature.

Care must be taken not rub the epoxy resin portion of Yetda LEDS with hard or sharp article such as the sand blast and the metal hook